



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,157	09/24/2003	Satoshi Hiratsuka	YAMA:058	2828
ROSSI & ASSOCIATES P.O. Box 826 Ashburn, VA 20146-0826			EXAMINER QIN, JIANCHUN	
			ART UNIT 2837	PAPER NUMBER

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/670,157

Applicant(s)

HIRATSUKA, SATOSHI

Examiner

Jianchun Qin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/13/06.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruki (U.S. Pat. No. 20020126874) in view of Eller et al. (U.S. Pat. No. 5889860) and Bell et al. (U.S. Pat. No. 5119711).

With respect to claim 1:

Haruki teaches an electronic musical apparatus comprising: a music playing data extracting device which extracts a music playing data file from a given music work resource (sections 0027, 0030, 0037 and 0048); an compressing device which compress said extracted music playing data file (sections 0027, 0030, 0037 and 0048); a storing device which stores said compressed music playing data file (sections 0027 and 0030); a decoding device which decodes said compressed music playing data file from said storing device (section 0034); and an automatic music playing device which plays music of said given music work resource based on said decoded music playing data file (section 0028).

Haruki does not mention expressly: an encrypting device which encrypt said extracted music playing data file using an encryption key; a decrypting device which decrypt said encrypted music playing data file from said storing device using a decryption key which corresponds to said encryption key; and wherein the music playing data file comprises MIDI data.

Eller et al. teach an electronic musical system comprising: an encrypting device which encrypt said extracted music playing data file using an encryption key (col. 5, lines 50-60; col. 8, lines 39-40); a storing device which stores said encrypted music playing data file (col. 5, lines 50-60; col. 6, lines 4-6); a decrypting device which decrypt said encrypted music playing data file from said storing device using a decryption key which corresponds to said encryption key (col. 5, lines 53-60; col. 6, lines 40-60; col. 8, lines 40-44); and an automatic music playing device which plays music of said given music work resource based on said decrypted music playing data file (col. 6, lines 12-17, lines 40-60; col. 8, lines 29-34, lines 40-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

Bell et al. disclose MIDI file translation system and method, including the steps and means of: extracting a music playing data file from a given music work resource,

Art Unit: 2837

converting said extracted music playing data file to a converted file, storing said converted music playing data file (col. 2, lines 20-27; cols. 2-3, lines 56-13 and lines 35-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Bell et al. into the combination of Haruki and Eller et al. in order to provide an electronic musical apparatus and system in which performance information embedded in an input file and represented by MIDI data can be automatically determined and proper program change events can be inserted for better playing music of the input file (Bell et al., cols. 1-2, lines 65-2).

With respect to claim 2:

Haruki teaches a method for ensuring secure use of a music playing data file comprising the steps of: extracting a music playing data file from a given music work resource (sections 0027, 0030, 0037 and 0048); compressing said extracted music playing data file (sections 0027, 0030, 0037 and 0048); storing said compressed music playing data file (sections 0027 and 0030); decoding said compressed music playing data file from said storing device (section 0034); and automatic playing music of said given music work resource based on said decoded music playing data file (section 0028).

Haruki does not mention expressly: encrypting said extracted music playing data file using an encryption key; decrypting said encrypted music playing data file from said storing device using a decryption key which corresponds to said encryption key; and wherein the music playing data file comprises MIDI data.

Eller et al. teach a method for ensuring secure use of a music playing data file comprising the steps of: encrypting said extracted music playing data file using an encryption key (col. 5, lines 50-60; col. 8, lines 39-40); storing said encrypted music playing data file (col. 5, lines 50-60; col. 6, lines 4-6); decrypting said encrypted music playing data file as stored in said step of storing using a decryption key which corresponds to said encryption key (col. 5, lines 53-60; col. 6, lines 40-60; col. 8, lines 40-44); and automatically playing music of said given music work resource based on said decrypted music playing data file (col. 6, lines 12-17, lines 40-60; col. 8, lines 29-34, lines 40-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

Bell et al. disclose MIDI file translation system and method, including the steps and means of: extracting a music playing data file from a given music work resource, converting said extracted music playing data file to a converted file, storing said converted music playing data file (col. 2, lines 20-27; cols. 2-3, lines 56-13 and lines 35-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Bell et al. into the combination of

Art Unit: 2837

Haruki and Eller et al. in order to provide an electronic musical apparatus and system in which performance information embedded in an input file and represented by MIDI data can be automatically determined and proper program change events can be inserted for better playing music of the input file (Bell et al., cols. 1-2, lines 65-2).

With respect to claim 3:

The teaching of Eller et al. further includes: said automatic music playing device renders said decrypted music playing data file unutilizable after said music playing device has played music of said given music work resource (col. 6, lines 47-60; col. 9, lines 17-36).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

With respect to claim 7:

Haruki further teaches: a computer program for ensuring secure use of a music playing data file (Abstract), said program comprising program instructions for a computer to execute: a step of extracting a music playing data file from a given music work resource (sections 0027, 0030, 0037 and 0048); a step of compressing said extracted music playing data file (sections 0027, 0030, 0037 and 0048); a storing device which stores said compressed music playing data file (sections 0027 and 0030).

Haruki does not mention expressly: a step of encrypting said extracted music playing data file using an encryption key; and wherein the music playing data file comprises MIDI data.

Eller et al. teach a computer program for ensuring secure use of a music playing data file (Abstract), said program comprising program instructions for a computer to execute: a step of encrypting said extracted music playing data file using an encryption key (col. 5, lines 50-60; col. 8, lines 39-40); and a step of storing said encrypted music playing data file (col. 5, lines 50-60; col. 6, lines 4-6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

Bell et al. disclose MIDI file translation system and method, including the steps and means of: extracting a music playing data file from a given music work resource, converting said extracted music playing data file to a converted file, storing said converted music playing data file (col. 2, lines 20-27; cols. 2-3, lines 56-13 and lines 35-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Bell et al. into the combination of Haruki and Eller et al. in order to provide an electronic musical apparatus and system in



Art Unit: 2837

which performance information embedded in an input file and represented by MIDI data can be automatically determined and proper program change events can be inserted for better playing music of the input file (Bell et al., cols. 1-2, lines 65-2).

With respect to claims 8-11:

The teaching of Haruki further includes: said automatic music playing device includes a tone generator that generates musical tone signals based on the decrypted data file (section 0028); the step of automatically playing music of said given music work resource includes generating musical tone signals based on the decrypted data file (section 0028); automatically playing music of said given music work resource based on said decrypted music playing data file (section 0028); and the step of automatically playing music of said given music work resource includes generating musical tone signals based on the decrypted data file (section 0028).

Haruki does not mention expressly: said data file is MIDI data file.

The teaching of Bell et al. includes: a tone generator that generates musical tone signals based on converted MIDI data file (col. 1, lines 21-30; col. 2, lines 20-27; cols. 2-3, lines 56-13 and lines 35-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Bell et al. into the combination of Haruki and Eller et al. in order to provide an electronic musical apparatus and system in which performance information embedded in an input file and represented by MIDI data can be automatically determined and proper program change events can be inserted for better playing music of the input file (Bell et al., cols. 1-2, lines 65-2).

3. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruki in view of Eller et al. and Bell et al., as applied to claims 1 and 3 above, and further in view of Oishi et al. (U.S. Pat. No. 6792539).

Haruki in view of Eller et al. and Bell et al. teach the method that includes the subject matter discussed above. The combination does not mention expressly: regarding claims 4 and 5, said given music work resource is in an encrypted condition, and said music playing data extracting device decrypts said given music work resource in the encrypted condition before extracting said music playing data file; regarding claim 6, said music playing data extracting device renders said decrypted given music work resource unutilizable after said music playing data extracting device has extracted said music playing data file from said encrypted given music work resource.

With respect to claims 4 and 5:

Oishi et al. teach a processing method and apparatus for encrypted audio track data transfer, comprising: encrypting a given music work resource by a first encryption means, decrypting said given music work resource in the encrypted condition, extracting data information from the decrypted file, and encrypting the data file again by a second encryption means (col. 3, lines 7-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Oishi et al. in the combination of Haruki, Eller et al. and Bell et al. in order to prevent illicit or unauthorized use and copying of the music (Oishi et al., col. 1, lines 14-27).

With respect to claim 6:

The teaching of Eller et al. further includes: rendering said decrypted music unutilizable after extracting said music playing data from said encrypted given music work resource (col. 6, lines 57-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate this teaching of Eller et al. into the apparatus and method of Oishi et al. so that, after extracting said music playing data from said data file encrypted by the first encryption means, said decrypted music would be made unutilizable, in order to prevent illicit or unauthorized use and copying of the music (Eller et al., Oishi et al., col. 6, lines 57-60 and Oishi et al., col. 1, lines 14-27).

#### ***Response to Arguments***

4. Applicant's arguments received 06/07/2006 with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-11 are rejected as new prior art reference (U.S. Pat. No. 5119711 to Bell et al.) has been found to teach the limitation of extracting MIDI data from a given music work resource. Detailed response is given in sections 2-3 as set forth above in this Office Action.

#### ***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.


Art Unit: 2837

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin  
Examiner  
Art Unit 2837

JQ 

  
LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER